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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,732	09/28/2001	William F. Bowers	022730-0027	3575
21125	7590	07/01/2004	EXAMINER	
NUTTER MCCLENNEN & FISH LLP WORLD TRADE CENTER WEST 155 SEAPORT BOULEVARD BOSTON, MA 02210-2604			MENON, KRISHNAN S	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/966,732		BOWERS ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Krishnan S Menon		1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 6-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

Claims 6-10 were pending.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claim 6 is rejected under 35 U.S.C. 102(e) as being anticipated Bowers (US 6,269,957 B1).

Bowers teaches an ultrafiltration vessel comprising a vessel having an interior wall having regenerated cellulose surface, with an outlet port and ultrafiltration membrane covering the port (col 1 lines 48-55; col 2 line 64- col 3 line25; col 3 lines 42-60; col 4 lines 35-40; also see fig 10 A-D). The referenced passages contemplate covering the entire inner surface of the vessel by regenerated cellulose.

2. Claims 7-10 are rejected under 35 U.S.C. 102(e) as anticipated by, or in the alternative, under 35 USC 103(a) as being unpatentable, over Bowers (US 6,269,957 B1)

Bowers teaches an ultrafiltration vessel comprising a vessel having an interior wall (col 2 line 64- col 3 line 25 and fig 10 A-D) with an outlet port (38, fig 5), an ultrafiltration membrane covering the port (col 4 lines 35-40), and the membrane having skin-to-skin seal effective to cover, and active, over the full wetted area of the vessel wall (col 3 lines 5-16 – when the halves are joined as described, they form a skin-to-skin seal of the membrane, covering the full wetted area) as in instant claim 7. The vessel comprises first and second halves (see fig 10 A-D, 13 A-E) and over-molded body portions holding the halves together as in instant claim 9. The half vessels are symmetric as in instant claim 10 (see fig 10 A-B).

Re the newly added limitation of “crush-seal” in claim 7, col 15 lines 33-50 describes compression seal (see fig 13D), and col 16 lines 27-35 describes how to use it for the two halves of the vessel in a clamshell construction. Col 7, line 66 – col 8, line 12 describes joining the halves like clamshells. Also, in crush seal, compression seal or ultrasonic welding of the two halves like clamshells, the final product in this clamshell joint cannot be differentiated from one-another, since the joint, being embedded in the wall, is not visible to the inside of the vessel, and the product no longer depends on the method of sealing. [Product by process: “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re *Thorpe*, 777 F.2d 695, 698, 227 USPQ 964,

966 (Fed. Cir. 1985).] The skin-to skin crush seal is effected by between the mating portions of the opposed half-cells as in claim 8 (see fig 10 A-D)

### ***Response to Arguments***

Applicant's arguments filed 6/7/04 have been fully considered but they are not persuasive.

Arguments re rejection of claim 6: Claim 6 recites a vessel *comprising* an interior wall having a regenerated cellulose surface. Claim is open ended. Reference teaches a vessel (vessel material is not recited in the claim) having a regenerated cellulose membrane surface, and therefore, reads into the claim. Applicant has disclosure for a vessel made of cellulosic material (cellulose acetate) having (integral) regenerated surfaces, but this is not claimed.

Arguments re claim 7: In response to the argument that Bowers fails to disclose a skin-to-skin crush seal, col 9 line 56 – col 10 line 7 of the reference teaches press-welding; col 15 lines 43-65 describe compression seal, and both these are if not same, equivalent to crush seal as defined by the applicant. Claim 7 recites a product, and crush seal describes a process for forming a seal, and is covered in the rejection. Applicants' arguments re the inadequacy of the Bower's method of making the seal is not persuasive because the area 54 described by the applicant is only the "sealed edge" in fig 10C. Also, applicants' crush seal has the same effect – the crushing force, which makes the seal possible, also would compress the regenerated cellulose to a dense film at sealed edge 54. Moreover, this argument is moot since the reference teaches

sealing methods that are if not the same, equivalent to "crush seals" in the paragraphs referenced above.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

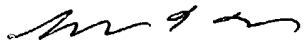
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S Menon whose telephone number is 571-272-1143. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1723

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Krishnan Menon  
Patent Examiner



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